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EXAMINER	
GREENE, JASON M	

ART UNIT	PAPER NUMBER
1724	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/775,892	BURNS ET AL.	
	Examiner	Art Unit	
	Jason M. Greene	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-3,7,9,11-16,20-22,26-31,33 and 35 is/are rejected.

7)☒ Claim(s) 4-6,8,10,17-19,23-25,32,34,36 and 37 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 01 April 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/10/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims

1. With regard to claim 15, the Examiner suggests Applicants rewrite the phrase "the locking ends of the filter elements are generally cylindrical locking ends" as "the locking end of the filter element is a generally cylindrical locking end" to clarify antecedent basis. Specifically, the Examiner notes that claim 14, from which claim 15 depends, recites only a single filter element while claim 15 makes reference to plural filter elements.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 35, the phrase "conventional" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "conventional"), thereby rendering the scope of the claim(s) unascertainable.

Specifically, since a wide variety of different filter elements are known from the prior art, it is not clear which of these filter elements are intended to be encompassed by the term "conventional".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 30, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Luy et al.

With regard to claim 30, Luy et al. discloses an apparatus capable of filtering a natural gas stream comprising a closed vessel (53) having a length and an initially open interior, a partition (61) disposed within the vessel interior, the partition having a planar inner and planar outer side, respectively, dividing the vessel interior into a first stage (70) and a second stage (71), an inlet port (73) in communication with the first stage, an outlet port (75) in communication with the second stage, at least one opening (111b) in the partition sized to receive a locking end of a tubular filter element (63) for supporting the filter element within the vessel, a mounting structure (pins 115) located on a

selected planar side of the partition, the mounting structure comprising at least one post (pin 115) supported by side flanges (support 113) so that the post lies in a plane which extends at least partly across the opening in the partition in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

With regard to the apparatus being for filtering natural gas, intended use has been continuously held not to be germane to determining the patentability of the apparatus, In re Finsterwalder, 168 USPQ 530 (CCPA 1971). Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, Ex parte Thibault, 164 USPQ 666 (PTO Board of Appeals 1969). Inclusion of the material worked upon by a structure being claimed does not impart patentability to the claims, In re Otto et al., 136 USPQ 458 (CCPA 1963). A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of that claimed, Ex parte Masham, 2 USPQ 2d 1647 (PTO Board of Appeals 1987).

With regard to claim 31, Luy et al. discloses the post (pin 115) being selectively positioned with respect to the partition opening for matingly engaging a rotational mounting means (slots 127a) provided on the locking end of the filter element for rotationally locking the filter element with respect to the partition and thereby supporting the filter element within the vessel interior in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

With regard to claim 33, Luy et al. discloses the mounting structure located on a selected side of the partition being a pair of spaced apart post elements (pins 115) which are aligned with respect to a partition opening in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. in view of Kott et al.

With regard to claims 1 and 2, Luy et al. discloses an apparatus capable of filtering a natural gas stream comprising a closed vessel (53) having a length and an initially open interior, a partition (61) disposed within the vessel interior, the partition having a planar inner and planar outer side, respectively, dividing the vessel interior into a first stage (70) and a second stage (71), at least one opening (111b) in the partition, an inlet port (73) in communication with the first stage, an outlet port (75) in

communication with the second stage, at least one tubular filter element (63), the tubular filter element being disposed within the vessel to sealingly extend from within the first stage, the filter element having a locking end, a tubular length, and a second end (131), a mounting structure (pins 115) located on a selected planar side of the partition, a rotational mounting means on the locking end of the at least one filter element which cooperates with the mounting structure of the vessel for rotationally locking the filter element with respect to the partition upon rotational movement of the filter element, wherein each of the filter elements has a generally cylindrical locking end and wherein the mounting means on the locking end of the filter elements is a slot (127a) provided in the cylindrical locking end in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

Luy et al. does not disclose the second end of the tubular filter element being a handle end, wherein the rotational movement of the filter element is from the handle end.

Kott et al. discloses a similar tubular filter element comprising a locking end (the threaded end 54), a tubular length, and a handle end (60) in Figs. 10 and 11 and col. 6, line 47 to col. 7, line 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the handle of Kott et al. into the second end of the tubular filter elements of Luy et al. to provide means for easily lifting and carrying the filter element, as suggested by Kott et al. in col. 7, lines 8-15.

With regard to claims 11 and 12, Luy et al. discloses the filter elements each having a filter wall (123-125) and a hollow core, wherein the input port (73), the vessel interior, the tubular filter elements (63), and the output port together define a flow passage within the apparatus, whereby the gas stream flows into the first stage through the input port and through the filter wall of the filter element and out the hollow core, thereby separating impurities out of the gas stream, and whereby the gas stream then flows out of the second stage (71) through the outlet port (75) in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

8. Claims 3, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. and Kott et al. as applied to claim 2 above, and further in view of Clements et al.

With regard to claim 3, Luy et al. discloses the mounting means on the locking end of the filter element being an L-slot in Fig. 4 and col. 6, lines 40-53.

Luy et al. and Kott et al. do not disclose the mounting means being a J-slot.

Clements et al. discloses a similar filter element (16) comprising a mounting means on a locking end (56) of the filter, wherein the mounting means is a J-slot (64,68) in Figs. 1 and 4 and col. 4, lines 50-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the J-shaped slot of Clements et al. into the filter elements of Luy et al. and Kott et al. to provide a locking channel to lock the filter

element in position, as suggested by Clements et al. in Figs. 1 and 4 and col. 4, lines 50-65.

With regard to claim 7, Luy et al. discloses the mounting structure located on a selected side of the partition being a post (pin 115) which is aligned with respect to a partition opening and wherein the slot receives and engages the post as the filter element is rotated in Figs. 3 and 4 and col. 6, lines 40-53.

With regard to claim 9, Luy et al. discloses the mounting structure located on a selected side of the partition being a pair of spaced apart post elements (puns 115) which are aligned with respect to a partition opening and wherein the slot receives and engages the post elements as the filter element is rotated in Figs. 3 and 4 and col. 6, lines 40-53.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. and Kott et al. as applied to claim 1 above, and further in view of Carlson.

Luy et al. discloses each of the tubular filter elements consisting of multiple woven metallic layers (123-125) in Fig. 5 and col. 6, lines 4-39.

Luy et al. and Kott et al. do not disclose the tubular filter elements consisting of multi-overlapped layers of non-woven filter strips.

Carlson discloses a similar filter media consisting of multi-overlapped layers of non-woven filter strips (metal wool 139) in Fig. 4 and col. 3, line 47 to col. 4, line 61.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the multi-overlapped layers of non-woven filter strips of Carlson into the filter elements of Luy et al. and Kott et al. to provide a filter element that is simple, inexpensive, and long-lived, as suggested by Carlson in col. 1, lines 31-65.

10. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. in view of Kott et al. and Carlson.

Luy et al. discloses a tubular filter element capable of filtering a natural gas stream passing through a filter vessel (57) comprising a body having a locking end, a tubular length, and a second end (131), the tubular length of the filter body comprising a filter wall having a plurality of woven fabric layers (123-125), the filter body also having a hollow core, a rotational mounting means on the locking end of the filter element which cooperates with a mating mounting structure provided within the filter vessel for rotationally locking the filter element with respect to the partition upon rotational movement of the filter element, wherein the locking end of the filter element is a generally cylindrical locking end and wherein the mounting means on the locking end of the filter elements is a slot (127a) provided in the cylindrical locking end in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

Luy et al. does not disclose the second end of the tubular filter element being a handle end, wherein the rotational movement of the filter element is from the handle end

or the tubular filter elements consisting of multi-overlapped layers of non-woven filter strips.

Kott et al. discloses a similar tubular filter element comprising a locking end (the threaded end 54), a tubular length, and a handle end (60) in Figs. 10 and 11 and col. 6, line 47 to col. 7, line 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the handle of Kott et al. into the second end of the tubular filter element of Luy et al. to provide means for easily lifting and carrying the filter element, as suggested by Kott et al. in col. 7, lines 8-15.

Carlson discloses a similar filter media consisting of multi-overlapped layers of non-woven filter strips (metal wool 139) in Fig. 4 and col. 3, line 47 to col. 4, line 61.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the multi-overlapped layers of non-woven filter strips of Carlson into the filter element of Luy et al. and Kott et al. to provide a filter element that is simple, inexpensive, and long-lived, as suggested by Carlson in col. 1, lines 31-65.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al., Kott et al. and Carlson as applied to claim 15 above, and further in view of Clements et al.

Luy et al., Kott et al. and Carlson do not disclose the mounting means being a J-slot.

Clements et al. discloses a similar filter element (16) comprising a mounting means on a locking end (56) of the filter, wherein the mounting means is a J-slot (64,68) in Figs. 1 and 4 and col. 4, lines 50-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the J-shaped slot of Clements et al. into the filter element of Luy et al., Kott et al. and Carlson to provide a locking channel to lock the filter element in position, as suggested by Clements et al. in Figs. 1 and 4 and col. 4, lines 50-65.

12. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry, Jr. '174 in view of Luy et al. and Kott et al.

Perry, Jr. '174 discloses a method of filtering solids from a natural gas stream comprising the steps of providing a filter vessel (11) having a first stage (11a) and a second stage (11b), the first stage being separated from the second stage by a partition having (20) at least one opening (not numbered), installing at least one replaceable filter element (26) within the filter vessel, the filter element being sealed within the opening in the partition, the filter element having a shoulder end (26a), a tubular length, and a second end, providing a mounting structure (spider 26d and rod 26c) located on a selected planar side of the partition, providing a mounting means (stop member 30) on the filter element which cooperates with the mounting structure of the vessel (using nut 26d) for securing the filter element to the mounting structure, filtering solids from the gas

stream in the first stage, and passing the gas from the filter element to the second stage in Figs. 1-3 and col. 2, line 31 to col. 3, line 28.

Perry, Jr. '174 does not disclose the tubular filter element having a locking end, the second end of the tubular filter element being a handle end or the method comprising providing a rotational mounting means on the locking end of at least selected filter elements which cooperates with the mounting structure of the vessel for rotationally locking the filter element with respect to the mounting structure upon rotational movement of the filter element from the handle end.

Luy et al. discloses a similar filter element and method of filtering solids from a gas stream wherein the filter element has a locking end (adjacent slots 127a) and a second end (131), the method comprising providing a rotational mounting means on the locking end of the at least one filter element which cooperates with the mounting structure (pins 115) of the vessel for rotationally locking the filter element with respect to the mounting structure upon rotational movement of the filter element, wherein each of the filter elements has a generally cylindrical locking end and wherein the mounting means on the locking end of the filter elements is a slot (127a) provided in the cylindrical locking end in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the locking end, cooperating mounting structure, and rotational mounting means of Luy et al. into the method and filter element of Perry, Jr. '174 to allow the filter elements to be easily and rapidly installed or replaced, as suggested by Luy et al. in col. 13, lines 9-15.

Kott et al. discloses a similar tubular filter element comprising a locking end (the threaded end 54), a tubular length, and a handle end (60) in Figs. 10 and 11 and col. 6, line 47 to col. 7, line 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the handle of Kott et al. into the second end of the tubular filter elements of the method of Perry, Jr. '174 and Luy et al. to provide means for easily lifting and carrying the filter element, as suggested by Kott et al. in col. 7, lines 8-15.

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. and Kott et al. as applied to claim 21 above, and further in view of Clements et al.

Luy et al. discloses the mounting means on the locking end of the filter element being an L-slot in Fig. 4 and col. 6, lines 40-53.

Perry, Jr. '174, Luy et al. and Kott et al. do not disclose the mounting means being a J-slot.

Clements et al. discloses a similar filter element (16) comprising a mounting means on a locking end (56) of the filter, wherein the mounting means is a J-slot (64,68) in Figs. 1 and 4 and col. 4, lines 50-65.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the J-shaped slot of Clements et al. into the filter elements of Perry, Jr. '174, Luy et al. and Kott et al. to provide a locking channel to lock

the filter element in position, as suggested by Clements et al. in Figs. 1 and 4 and col. 4, lines 50-65.

14. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. in view of Kott et al.

With regard to claim 26, Luy et al. discloses a method of maintaining a filter vessel (53) having associated tubular filter elements (63), the filter vessel having a first stage (70) and a second stage (71), the first stage being separated from the second stage by a partition (61) having at least one opening through which the filter elements are sealingly disposed, the method comprising the steps of opening the multi-stage vessel, removing at least one of the filter elements from the filter vessel, replacing the filter element with a replacement filter element, creating a fluid-tight seal between the replacement filter element and the opening, closing the multi-stage vessel, and wherein the filter element is providing with a locking end, a tubular length, and a second end, a mounting structure (pins 115) is located on a selected planar side of the partition, a rotational mounting means (slots 127a) is located on the locking end of at least selected filter elements which cooperates with the mounting structure of the vessel for rotationally locking the filter element with respect to the partition upon rotational movement of the filter element in Figs. 1-4, col. 3, line 43 to col. 7, line 29, and col. 13, lines 9-15.

Luy et al. does not disclose the second end of the tubular filter element being a handle end, wherein the rotational movement of the filter element is from the handle end.

Kott et al. discloses a similar tubular filter element comprising a locking end (the threaded end 54), a tubular length, and a handle end (60) in Figs. 10 and 11 and col. 6, line 47 to col. 7, line 15.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the handle of Kott et al. into the second end of the tubular filter elements of the method of Luy et al. to provide means for easily lifting and carrying the filter element, as suggested by Kott et al. in col. 7, lines 8-15.

With regard to claim 27, Luy et al. discloses the step of creating a fluid-tight seal between the replacement element and the opening in the partition being achieved by using an o-ring seal (133) positioned on the locking end of the filter element in Fig. 3 and col. 7, lines 15-17.

15. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. and Kott et al. as applied to claim 26 above, and further in view of Perry, Jr. '284.

Luy et al. discloses the step of creating a fluid-tight seal between the replacement element and the opening in the partition being achieved by using an o-ring seal (133) positioned on the locking end of the filter element in Fig. 3 and col. 7, lines 15-17.

Luy et al. and Kott et al. do not disclose the step of creating a fluid-tight seal between the replacement element and the opening in the partition being achieved by using a chevron-shaped seal positioned on the locking end of the filter element.

Perry, Jr. '284 discloses a similar method wherein a fluid-tight seal between a replacement element and an opening in a partition is achieved by using a chevron-shaped seal positioned on a sealing end of the filter element in Fig. 5, col. 1, lines 45-52 and col. 5, lines 37-53.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the chevron-shaped seal of Perry, Jr. '284 into the method of Luy et al. and Kott et al. to ensure a reliable seal between the replacement element and the partition, as suggested by Perry, Jr. '284 in col. 1, lines 45-52 and col. 5, lines 37-53.

16. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luy et al. and Kott et al. as applied to claim 26 above, and further in view of Carlson.

Luy et al. discloses each of the tubular filter elements consisting of multiple woven metallic layers (123-125) in Fig. 5 and col. 6, lines 4-39.

Luy et al. and Kott et al. do not disclose the tubular filter elements consisting of multi-overlapped layers of non-woven filter strips.

Carlson discloses a similar filter media consisting of multi-overlapped layers of non-woven filter strips (metal wool 139) in Fig. 4 and col. 3, line 47 to col. 4, line 61.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the multi-overlapped layers of non-woven filter strips of Carlson into the filter elements of Luy et al. and Kott et al. to provide a filter element that is simple, inexpensive, and long-lived, as suggested by Carlson in col. 1, lines 31-65.

Allowable Subject Matter

17. Claims 4-6, 8, 10, 17-19, 23-25, 32, 34 and 36-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claim 35 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 4-6, 17-19 and 23-25, Luy et al. discloses the generally cylindrical locking end of the filter elements joining the tubular length of the filter elements at a neck region (ring 127) of each filter element, wherein a seal means (133) is located at the neck region for sealing against the partition when the filter element is locked in position in Fig. 3 and col. 7, lines 15-17.

The prior art made of record does not teach or fairly suggest the apparatus of claim 1, the filter element of claim 15, or the method of claim 21 wherein the neck region forms a region of increased external diameter along the tubular length of the filter element.

With regard to claims 8 and 32, Luy et al. discloses each post (pin 115) being supported by a single side flange (support 113), the side flange arranged generally perpendicular to the selected planar face of the partition, whereby the post extends in a plane generally parallel to the plane of the selected planar face of the partition in Figs. 3 and 4 and col. 5, lines 45-63.

The prior art made of record does not teach or fairly suggest the apparatus of claim 7 or the apparatus of claim 30 wherein the post is supported between opposing side flanges.

With regard to claims 10 and 34, Luy et al. discloses each of the post elements (pins 115) being supported by a single side flange (support 113), the side flanges being arranged generally perpendicular to the selected planar face of the partition, whereby

the spaced apart post elements extends in a plane generally parallel to the plane of the selected planar face of the partition in Figs. 3 and 4 and col. 5, lines 45-63.

The prior art made of record does not teach or fairly suggest the apparatus of claim 9 or the apparatus of claim 33 wherein the post elements are supported between opposing side flanges.

With regard to claims 35-37, Luy et al. discloses the filter element comprising rotational mounting means (slots 127a) for engaging the partition opening of the apparatus in Figs. 1-4 and col. 3, line 43 to col. 7, line 29.

The prior art made of record does not teach or fairly suggest the apparatus of claim 30 wherein a filter element not having rotational mounting means is retrofitted to be installed within the apparatus, the filter element carrying mounting means other than rotational mounting means for engaging the partition opening of the apparatus.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Wonderling, Carr, De Martino, Berquist et al., Connors, Jr., Harms, II, Paucha and DE 34 05 929 A1 references disclose similar filter systems.

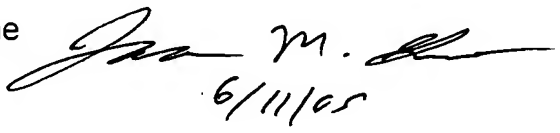
21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571)

272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Greene
Examiner
Art Unit 1724



jmg
June 11, 2005